
ROOA02

Aid to Education

Maryland State Department of Education

Response to the Analyst's Review and Recommendations

House Appropriations Committee – February 16, 2006
Senate Budget And Tax Committee – February 20, 2006

Performance Analysis: Third Year for Measuring Adequate Yearly Progress

MSDE should discuss the factors that contributed to delayed 2005 final AYP results, including the new methodology used in determining whether schools systems met AYP targets. Clarification should be provided about the comparison of 2005 AYP results with prior years' results. MSDE also should discuss the continued performance of special education, FRPM, and LEP students at levels below their peers.

Final Statewide AYP Results

The final Adequate Yearly Progress (AYP) results for 2005 (used to determine School Improvement and System Improvement Status for 2005-2006 school year) were delayed to allow the State to take advantage of new federal flexibility for No Child Left Behind and to implement changes in AYP measures that have reduced testing at the high school level. As a result, final decisions on School Improvement Status and School System Improvement Status were also delayed. (In late summer 2006 we will return to a standard timeline).

As of 2/15/06

Schools Making/Not Making AYP in 2005

Made AYP		Did Not Make AYP		School Improvement	
Number	%	Number	%	Number	%
1039	73.2%	311	21.9%	233	16.4%

% determined using total school count of 1420 (all public schools)

Of the 233 schools in improvement:

- 95 are Title I schools;
- 65 are in School Improvement Year 1;
- 79 are in School Improvement Year 2; and
- 80 are in Restructuring (15 planning, 65 implementation).

Based on 2005 results, 26 Maryland schools exited improvement.

Student Performance

Reading and mathematics scores on the Maryland School Assessment (MSA) improved in all 24 school systems in 2005. For the second consecutive year, MSA scores from the State's 24 local systems also showed steady improvement in the performance of students across racial categories, and for most students receiving special services.

The majority of math and reading scores for American Indian, Asian, African American, White, and Hispanic students increased. The percentage of African American students in grade three scoring at proficient levels in mathematics increased from 47.1 percent in 2003 to 63.5 percent in 2005. The percentage of Hispanic students in grade three scoring in the proficient range in

reading jumped from 39.2 percent in 2003 to 63.3 percent in 2005. In both instances, the gap in student achievement between racial subgroups is smaller than it had been two years earlier.

Low-income students posted some remarkable strides. The percentage of fifth grade students receiving FARMs and scoring in the proficient range in mathematics improved from 33.3 percent in 2003 to 50.6 percent in 2005. The percentage of third grade students receiving FARMs scoring in the proficient range in reading jumped from 36.9 percent to 60.5 percent.

There has been rapid success in the special education student population, particularly in the early grades. The percentage of third grade special education students in the proficient range in reading has more than doubled from 25 percent in 2003 to 51.3 percent in 2005.

As noted earlier, while all racial categories scored gains, there is growing evidence that the achievement gap between Asian-American and White students, and African-American and Hispanic students, is beginning to close. The percentage of White fifth grade students scoring in the proficient range for reading jumped from 79.4 to 85.5 between 2003 and 2005—an increase of 6.1 percentage points, and Asian American students scoring proficient or better jumped from 79.7 percent to 88.1 percent—a jump of 8.4 percentage points. But the improvement seen in other racial categories was more dramatic. Over those same two years, the percentage of African-American fifth grade students scoring at proficient levels in reading improved from 48 percent to 60.6 percent, a jump of 12.6 points; while the percentage of Hispanic fifth graders scoring at proficient levels increased from 51.4 percent to 63.3 percent, an increase of 11.9 points.

In 2005, Maryland's graduation rate increased to 84.8% from 84.2% in 2004. The increase was reflected in all racial groups except for Hispanic students. African-American students' graduation rate increased to 78.21% from 77.6%.

Web visitor can access hundreds of pages of data on every Maryland school and school system at www.mdreportcard.org.

New Flexibilities Used

In August 2004, MSDE decided to use the English 2 High School Assessment (HSA) to measure reading at the high school level and to discontinue the grade 10 Maryland School Assessment in reading. Similarly, in 2005, MSDE decided to use the Algebra/Data Analysis High School Assessment (HSA) to measure math at the high school level and to discontinue the Maryland School Assessment in geometry. These decisions saved time and money on test development and scoring, and reduced testing time at the high school level. To use the English and Algebra/Data Analysis HSAs in measuring adequate yearly progress for No Child Left Behind, the State Board first had to identify performance standards—basic, proficient, and advanced—for both tests. Setting standards required a review of the test data from the spring 2005 testing administration. In the summer of 2005, after the tests were administered and available, MSDE conducted standard-setting exercises with educators, stakeholders, and testing experts. The State Board reviewed the standard-setting recommendations and established English and Algebra/Data Analysis proficiency levels on October 31, 2005. The proficiency levels were then applied to the test data and used to determine AYP for high schools.

High school AYP results were sent to school systems in November and a 30-day appeal period followed. After appeals were submitted, MSDE began a thorough review of all of the appeals—a complex, time-consuming process as it required a review of individual student records to determine if students were eligible for a modified assessment.

In 2005, the U.S. Department of Education (USDE) granted Maryland permission to consider schools' AYP appeals based on students with disabilities who would have been eligible to take a modified State assessment if one had been available in 2005. This appeal opportunity was a result of the USDE's decision in May 2004 to give states permission to develop modified assessments for a small number of students with disabilities who are able to make progress toward grade levels standards, but not in the same time frame as other students. Maryland is currently developing modified assessments for implementation in 2007. By taking advantage of the USDE appeals opportunity, Maryland has benefited from the federal decision on modified assessments even before MSDE has created the test. We anticipate using this appeals process again in 2006.

After the appeals review process was complete, MSDE updated the Adequate Yearly Progress determinations and School Improvement Status of high schools. The final steps for MSDE are to calculate and release the school system AYP and the School System Improvement status.

Maryland's methodology to determine if school systems met AYP has not changed. Adequate Yearly Progress is determined by whether a school (or system) makes annual goals in reading and math performance, graduate rate, and attendance rate among all students and in all subgroups.

Maryland's methodology for determining System Improvement Status *has* changed effective with the 2005-2006 school year (based on 2005 data).

- A school system will enter or move further in System Improvement only if the school system misses an annual measurable objective in the same reported area at all three grade bands (elementary, middle, and high) for two consecutive years.
- A school system exits System Improvement after it meets the annual measurable objectives in the reported area in at least one grade band for two consecutive years *and* continues to meet objectives in other reported areas in at least one grade band.

The new methodology provides a more valid measure of school systems' performance and requires more detailed information to be produced. This additional information, which is made available to the public on www.mdreportcard.org, can be used in evaluating Bridge to Excellence and by local school systems to more strategically allocate resources.

In 2004, eight school systems (Allegany, Cecil, Charles, Dorchester, Kent, Prince George's, St. Mary's, and Somerset) were in System Improvement, and one school system (Baltimore City) was in Corrective Action.

These systems will remain in System Improvement until they meet the exit criteria previously discussed.

MSDE should discuss the steps taken toward meeting the NCLB mandate of 100% highly qualified teachers in core subjects, as well as the disparity in the percentage of classes taught by highly qualified teachers in high- and low-poverty areas.

NCLB requires that, by the end of the 2005-2006 school year, all classes in core academic subjects be taught by highly qualified teachers. Under No Child Left Behind, “highly qualified” has a very specific and narrow meaning. The NCLB definition of “highly qualified” pertains to qualifications with a strong focus on content. One thing that has become evident through the gathering and analysis of data on highly qualified teachers in accordance with NCLB is that teacher quality differs significantly between high- and low-poverty schools. The percentage of core academic subject classes taught by highly qualified teachers in high-poverty schools for the 2003-2004 school year was 46.4 percent, or less than half; this number increased to 57.5 percent for the 2004-2005 school year. The percentage of core academic subject classes taught by highly qualified teachers in low-poverty schools for the 2003-2004 school year was 78 percent, increasing to 84.9 percent in 2004-2005. The gap has narrowed, and improvement has occurred in both categories. Overall, 75.4 percent of core academic subject classes in Maryland schools were taught by highly qualified teachers last year, representing progress from 66.8 percent in 2003-2004. There is wide variance between school systems in terms of this requirement. While we can anticipate that some school systems will hit the target by the conclusion of the 2005-2006 school year, it is clear that some will fall short of the mark. Comparative data for the past two years are shown below:

Highly Qualified Teachers—2004 to 2005 Comparison

School Type	2004 Total Number of Core Academic Classes	2005 Total Number of Core Academic Classes	2004 Number of Core Academic Classes Taught by Highly Qualified Teachers	2005 Number of Core Academic Classes Taught by Highly Qualified Teachers	2004 Percentage of Core Academic Classed Taught by Highly Qualified Teachers	2005 Percentage of Core Academic Classed Taught by Highly Qualified Teachers
All Schools in State	164,737	161,774	110,060	122,027	66.8%	75.4%
By Poverty Status						
High-Poverty Schools	26,998	25,277	12,578	14,529	46.6%	57.5%
Low-Poverty Schools	51,719	50,396	40,344	42,798	78.0%	84.9%
By Level						
Elementary (PreK-5)	46,900	55,554	34,246	44,205	73.0%	79.6%
Secondary (6-12)	117,837	106,220	75,814	77,822	64.3%	73.3%

The data on the percentage of classes taught by highly qualified teachers, while improving, do not yet reflect a precise view of reality. The data mandated are much more complex than have ever been required of states and school systems, and the information needed to make the determination of who is highly qualified is not always readily available. These data are onerous to collect, and the task of doing so has placed a substantial burden on local school systems as well as MSDE. There are varying confidence levels across the State in these data, but the results continue to improve as school systems and MSDE develop improved data systems aligned with

NCLB requirements. Efforts have been underway since NCLB's inception to improve data collection techniques; further improvement is foreseen for this year. The data are as accurate as can be produced right now. Currently reported data are for 2004-2005; MSDE is in the process of collecting information for 2005-2006, which will be reported in September, 2006. These data will reflect status as of December 2005. An additional data collection and reporting cycle will occur for 2006-2007, representing status as of December 2006 and will more accurately represent the target set under NCLB. MSDE is collaborating with staff in local school systems to ensure understanding of the law, to improve data standards for reporting and analysis, and to develop strategies for meeting requirements.

At the State level, multiple efforts are underway to meet the requirement that all core academic subjects be taught by highly qualified teachers. The Quality Teacher Incentive Act of 1999 contains provisions that provide a good start to a comprehensive, competitive effort to attract and retain quality teachers. These provisions are codified in Education Article § 6-306 and Tax Article § 10-717; one of them, stipends for teachers holding Advanced Professional Certificates, is targeted specifically to the neediest schools. Reinstitution of legislation permitting limited earnings limitation exemptions for rehired retired teachers occurred last year (SB 663), enabling local school systems to recruit and rehire retired educators in certain circumstances. The legislation targets this strategy to critical shortage areas in our neediest schools.

Certification options have been expanded, enabling teachers to become highly qualified in additional subjects; furthermore, there is expanded use of alternative routes to certification, enabling non-traditional and well-qualified candidates to enter the classroom. This year, regulations regarding alternative teacher preparation have been refined and clarified. MSDE has been awarded a federal grant focused specifically on developing alternative pathways to teacher certification that will enhance mobility for members of the military and their spouses; such programs will also serve other non-traditional candidates well. A federal Transition to Teaching grant is having a positive impact, and a new Troops to Teachers grant will help attract military career changers to Maryland in increasing numbers. Programs like Teach for America and the New Teacher Project are also in place and utilize alternative certification pathways.

Increasing emphasis on professional development and expanded articulation between MSDE and local school systems will help teachers to become highly qualified. Adoption by the State Board of Education (MSBE) of a High Objective Uniform State Standard of Evaluation (HOUSSSE) in October 2003 provides expanded pathways that can be used by veteran teachers to achieve "highly qualified" status. In October 2004, the MSBE adopted a HOUSSSE for special educators, providing an expanded set of options tailored specifically to special educators teaching core academic subjects consistent with recent guidance from the U.S. Department of Education pertaining to teachers of multiple subjects. This year, the MSBE adopted a HOUSSSE for teachers of English for Speakers of Other Languages (ESOL).

Local school systems are working to address the "highly qualified" requirements of NCLB, as well. Ultimately, they are responsible for hiring teachers and for providing professional development. Efforts include strategies such as providing assistance in test preparation to help teachers achieve "highly qualified" status, partnering with community colleges and four-year colleges and universities to offer focused professional growth to help their teachers meet requirements, developing targeted recruitment strategies to help them attract highly qualified

teachers, and offering bonuses to teachers in critical shortage areas and/or low-performing schools. School systems' Master Plans address planning and strategies for meeting the requirements of NCLB, including those pertaining to highly qualified teachers. These include:

1. raising minimum salaries for new and existing teachers at the entry levels, offering extended contracts to new teachers;
2. improving efforts to monitor and support teachers as they complete their certification;
3. expanding alternative certification programs;
4. significantly increasing funding for and in other ways enhancing recruitment programs;
5. providing additional mentoring support for new teachers; and
6. establishing special teacher certification programs in cooperation with Maryland colleges and universities.

Through the Master Plan update process, local school systems are required to provide updates on the strategies they have been using to increase the percentage of classes that are taught by highly qualified teachers in all schools and assess their effectiveness. The local school systems must analyze and state:

1. What strategies were fully implemented?
2. Did the strategy result in increasing the percentage of classes taught by highly qualified teachers?
3. If not, what changes does the school system have planned?
4. What new strategies, if any, is the school system implementing?

Local school systems were also required to use the same process to address disparities between the percentage of core academic subjects taught by highly qualified teachers in high- and low-poverty schools.

The Maryland State Department of Education Division of Instruction (DOI) works with local school systems in the distribution and utilization of their federal funds through Title II, Part A, Preparing, Training, and Recruiting High-Quality Teachers and Principals. Local school systems must utilize their funds in ways that are focused on recruiting and hiring highly qualified teachers and principals, improving the quality of the teaching force, and retaining and providing support to highly qualified teachers and principals. Through review of the allowable activities in the use of the federal funds and through monitoring throughout the entire school year by DOI of the local school systems, continuous dialogue is centered on the appropriate selection and implementation of those activities that will result in an increase of the number of highly qualified teachers in all schools and particularly in high-poverty schools.

MSDE will be gathering best practices used by local school systems that are resulting in meeting the NCLB mandate and distributing those practices to Assistant Superintendents and Title IIA contacts within each of the local school systems.

As MSDE works with each local school system, we realize that each is working to meet the 100% target. Each year, as new teachers are hired, every attempt will be made to attract highly qualified candidates. MSDE will support, through guidance from the Master Plan, strategies that local school systems are using to increase their percentages of classes taught by highly qualified

teachers and, at the same time, implement ongoing strategies that must always be in place to support the yearly contracting of teachers who may not be initially highly qualified.

MSDE is actively engaged in addressing the need for high quality professional development for all of Maryland's teachers. State Superintendent Dr. Nancy Grasmick appointed the twenty-five member Professional Development Advisory Council that developed standards and indicators to define the key elements of high quality professional development. As adopted by the MSBE, these standards will guide the professional development designed and implemented by the Maryland State Department of Education, as well as professional development efforts by the 24 local schools systems and institutions of higher education who provide teacher professional development. These standards are designed to assist key policy makers and professional development providers with a tool to reallocate existing resources to most effectively assist teachers in content knowledge and pedagogy needed to meet Maryland's goals for highly qualified teachers.

The State of Maryland may need new financial incentives and efforts to improve teacher quality. Increased funding for school administrator support, peer support, and professional development programs will help retain beginning teachers. Veteran teachers need school administrator support, differential pay, leadership responsibility, and career growth opportunities. Proposed legislation currently under consideration would provide expanded support for career changers pursuing alternative teacher preparation (HB 794 – Maryland Alternative Teaching Opportunity Program); compensation models that might address the disparity in teacher quality between low- and high-poverty schools (SB 465 – Commission to Study Pay-for-Performance Models of Teacher Compensation); and initiatives to support the attraction and retention of quality teachers in Maryland, particularly in hard-to-staff schools (SB 458 – Teacher Quality Act of 2006). Initiatives such as the Governor's Teacher Excellence Awards, proposed in the 2007 budget, would enhance the profession and reward outstanding teachers.

Recently, the U.S. Department of Education (USDE) has provided guidance to states indicating that those states that will not achieve the goal this year of 100 percent of all core academic subjects taught by highly qualified teacher but having rigorous and "good faith efforts" in place designed to meet the teacher quality requirements of NCLB may be invited to submit plans demonstrating how they will achieve the target by the end of the 2006-2007 school year. The determination of whether states have made such a "good faith" effort as well as the determination that states will not hit the target by the end of this year will be based on USDE's review of the states' Consolidated State Performance Report (CSPR). The CSPR is due in March 2006; thus, there is no knowledge yet as to the potential of an extension in meeting the current requirement. MSDE is optimistic that we will receive consideration for this flexibility.

Criteria to be used by the USDE were outlined in correspondence from the U.S. Secretary of Education on October 21, 2005:

➤ Requirement #1: Highly Qualified Teacher (HQT) Definition:

- the definition of HQT must be consistent with federal law (such as with regard to the use of assessments, the use of the HOUSSE standard, etc.); and
- use the definition to determine the status of all teachers.

➤ Requirement #2: Public Reporting:

- state and local school system report cards must include accurate and complete reports on the number and percentage of classes in core academic subjects taught by HQTs; and
- states must have procedures to ensure that the “parent’s right to know” requirements in the law are implemented by local education systems in the state.

➤ Requirement #3: CSPR Data:

- submit complete and accurate data as part of the CSPR on the number and percentage of core academic classes being taught by HQTs in all schools and in high- and low-poverty schools (additional data is likely to be required in this year’s report regarding the categories of teachers who do not meet HQT requirements).

➤ Requirement #4: Equitable Distribution:

- states must demonstrate that they are taking steps and making a good faith effort to ensure that inexperienced, unqualified, or out-of-field teachers do not teach poor or minority children at higher rates than other children.

In assessing Maryland’s status with regard to these criteria, MSDE initially determined that our State’s policies and practices warrant strong consideration by the USDE. While awaiting federal review of Maryland’s CSPR, MSDE staff is developing a plan to demonstrate its ability to meet a new target, if established, of the 2006-2007 school year for meeting NCLB teacher quality requirements.

Fiscal 2006 Actions
Adjustments to the Fiscal 2006 Appropriation

The Superintendent should discuss how the overestimate occurred and steps taken to ensure it does not re-occur this year. The Superintendent should also discuss how decisions were made to reallocate funds to these programs and whether additional reallocations will still be made in fiscal 2006.

The fiscal 2006 major State aid calculations were the first that used a new process for the collection and verification of the number of students eligible for free and reduced price meals. The 2006 grants would be based on the number of eligible students as verified under the federal program's requirements for verification. The "raw" count of students as of October 31, 2004, was therefore reduced in two steps. First, the number of students ineligible under the statute for State aid purposes, such as adults and prekindergarten students, was subtracted. Second, each system conducted the federal process where a sample of eligibility forms is tested for income verification. Any students from this sample whose income could not be verified as eligible for the program were also eliminated from the count for State aid purposes.

School systems had until December 15 to complete this federal verification, and were required to submit their final results to MSDE following this verification. Unfortunately, one of the large systems experienced significant difficulty in conducting this verification and providing MSDE with certified counts. That issue was not resolved until the spring of 2005. Because the Compensatory Education grant formula is wealth-equalized, changes in any one system's counts affect the distribution of grants to all systems.

The reauthorization of the National School Lunch Program has altered the timelines for program sponsors to conduct the verification, requiring that it be completed by November 1. Systems are now reporting to MSDE several weeks earlier than last year. As systems adapt to this new verification and reporting process, we anticipate a greater confidence in the reliability of the numbers prior to the development of the Governor's allowance.

The items funded represent high priorities for the Department, the administration, and the General Assembly, including expanding the pool of funds distributed Statewide to schools in various stages of school improvement. At present, there are no plans for further reallocations of these funds.

Issues

1. Estimating Funding for Nonpublic Placements

Based on these assumptions, DLS estimates that the State cost of nonpublic placements in fiscal 2007 would be \$116,228,180. Therefore, DLS recommends reducing the fiscal 2007 allowance by \$3 million.

See response to Recommendation Action #1.

2. MSDE Approves 23 Master Plan Updates

The Department of Legislative Services recommends that, beginning with the December 2006 submission, MSDE reports focus more on new educational initiatives undertaken at the local level and detail the new personnel and resources that will be allocated to each major education initiative. DLS also recommends that MSDE provide further guidance to local school systems on classifying expenditures, particularly those costs to be identified as mandatory.

The *Bridge to Excellence in Public Schools Act*, developed through the work of the Thornton Commission, provided a powerful standards-based education framework for Maryland's 24 local school systems to create a vision of public education that ensures the acceleration of achievement for all students. This vision was created in each local school system's comprehensive master plan. The success of standards-based reform depends on the State's ability to hold students, schools, and school systems accountable for making progress toward and achieving State standards. The master planning process is the accountability mechanism used to hold students, schools, and school systems accountable for meeting State standards, and the *Education Fiscal Accountability and Oversight Act of 2004* strengthened fiscal accountability, while maintaining the spirit of a standards-based education model.

In addition to other statutorily required financial documents, local school systems must now provide biannual fiscal reports to MSDE and their respective county government. The State Superintendent must review and report how each county's budget aligns with the master plan and any updates to it. Local school system master plan updates contain two budget components – one outlines the current year plan, and the other compares the prior year plan with actual revenue and expenditures – designed to demonstrate alignment of local school system resources with master plan goals and objectives.

The 2005 Master Plan Update is the second year in which school systems were required to submit both budget components. In keeping with the spirit of the Bridge to Excellence legislation and the recommendations of the legislative auditor, local school systems were asked to allocate their increased resources based on their own local goals and objectives. The expectation was that the allocation of resources could then be aggregated to one of the five Elementary and Secondary Education Act of 1965 (ESEA) goals, the common denominator among all school systems. To demonstrate programmatic initiatives, local school systems were

asked to separate programmatic expenditures from “cost of doing business” expenditures. School systems that did not have a local goal directly connected to improving delivery of services were asked to create a separate category for these allocations.

MSDE conferred with stakeholders and internal staff to assess the effectiveness of the 2005 master plan updates and the guidance provided to local school systems. Several discussions resulted in a number of recommendations for improving this process for the 2006 update. Included among these recommendations is the invitation to a senior analyst with the Department of Legislative Services to participate in the Bridge to Excellence Workgroup – a stakeholder group tasked with advising MSDE on guidance to local school systems regarding the master planning process. Staff has also analyzed both budget components. This is an ongoing process, one that is deliberated in light of the multitude of financial reports submitted by local school systems. MSDE staff has looked at the expenditure reporting in both budget components as well as the self-analyzing questions to develop recommendations for improving the process. Some of these recommendations include clarifying applicable “cost of doing business” expenditures, clearly identifying expenditures for new positions, and addressing the issue of identifying redirected funding.

3. Performance Audits Completed for Baltimore City and Prince George’s County Public Schools

MSDE should comment on MSDE’s audit function and any plans to monitor LEA progress in addressing OLA findings and recommendations.

The Audit Office currently visits each LEA every other year; at that time, our audit covers the previous two years for:

- Enrollment for calculating the Foundation Program;
- State Compensatory Education (FRPM Counts);
- Special Education student counts;
- Limited English Proficiency student counts;
- Transportation Aid/Disabled Student Transportation counts;
- Student Transportation Aid;
- CTAL Equipment Inventory Test of Purchasing Procedures;
- Students with Disabilities – Nonpublic Placements;
- Teacher Certification;
- Criminal Background Checks for Teachers;
- Recalculation of Maintenance of Effort and Test of Financial Reporting requirements;
- Internal Control Review;
- Follow-up of Prior Audit Findings and Recommendations; and
- Title I Comparability.

The MSDE Audit office could not incorporate the follow-up of OLA without additional staff. Little insight would be gained without actually testing their progress with corrective action during field work.

Recommended Actions

Amount Reduction

1. Reduce funding for the Nonpublic Placement program. \$3,000,000 GF

MSDE opposes this recommendation. The MSDE annual projections include growth in the number of nonpublic special education placements by the local school system (LSS) and the increase in the costs of nonpublic special education school placements. This is required to ensure a free appropriate public education (FAPE) and service provisions outlined in Individualized Education Programs (IEPs) of students with disabilities in accordance with Individuals with Disabilities Education Act (IDEA) and Code of Maryland Annotated Regulations (COMAR).

- MSDE does not control placements. These decisions are made at the local school system level by IEP teams.
- Many factors contribute to the State costs of the Nonpublic Tuition Assistance Program – program costs, the local 300% share, number of placements the local school system makes, the school in which the local school system decides to implement each student’s IEP, and related services that a student’s IEP requires.
- All of the above factors have to be estimated at the time the budget request is being developed and submitted. The required information schedule is long before actuals from the prior year are available.

2. Reduce funding for Environmental Education Program. \$1,100,000 GF

MSDE opposes this recommendation. This reduction will seriously impair services to underserved children and further delay Maryland’s implementation of the Stewardship Provision of the Chesapeake Bay 2000 Agreement. This Agreement, signed by the governors of the six Bay watershed states and the mayor of the District of Columbia, calls for a “meaningful watershed experience for all students before they graduate.” The context of this meaningful experience is supported by the Maryland Voluntary State Curriculum in Science and Social Studies. The study of local and regional ecology, the Chesapeake Bay, environmental issues, geography, and economics is embedded in the Science and Social Studies Content Standards in grades K-8. In addition, the Science Skills and Processes Content Standards outline the scientific and investigative science skills that students need to develop.

The funding is targeted to NorthBay, a nonprofit provider of these watershed experiences. The curriculum at NorthBay directly instructs in the ecology component of the Grade 6 Voluntary State Curriculum and is a model for a meaningful watershed experience. The weekly fee, about \$55 per day per student, includes room, board, instruction, all materials, recreation, and 24-hour supervision. This per diem cost is competitive with the average for similar programs around the State that range from \$50-\$80 per student per day. The requested funding is needed to pay the fee for children whose families cannot afford to send them. The proposed budget would allow 6,800 students to have this experience; this recommendation would cut that number to 2,400.

3. Delete funding for Science, Technology, Engineering, and Mathematics Academies.

\$2,000,000 GF

MSDE opposes this recommendation. In concert with MSDE's position, Craig R. Barrett, CEO of Intel, stated, "The United States now stands in immediate danger of losing its edge. Each of the nation's 16 million high school students must master complex skills and knowledge to be able to compete in the global economy."

Recent research, legislation, and national debate on the crisis in America's competitive educational and economic edge strongly supports significant changes in educational programs in science, technology, engineering, and mathematics. See, for example:

- *Rising Above the Gathering Storm*: The report to the Committee on Science, U.S. House of Representatives October 20, 2005
- *World is Flat: A Brief History of the 21st Century* – Thomas Friedman
- *The American Competitiveness Initiative (ACI)* announced during the State of Union Address to encourage American Innovation and strengthen our nation's ability to compete in the global society.
- *Protecting America's Protective Edge (Proposed bipartisan legislation by Domenici, Bingaman, Alexander, Mikulski)*

Therefore in Maryland, we know that:

- Many important and essential careers for our nation's economy, strength, and security involve mathematics and science directly and indirectly. Students should be well prepared to take full advantage of wide career options as they leave secondary school.
- As scientific and technological advances evolve, it is increasingly important that all citizens are educated and thoughtful in evaluating and responding to those advances, within their own lives as well as nationally and internationally.

Goal

The goal of Maryland's Science, Technology, Engineering, and Mathematics (STEM) Academies is to initiate two Academies, each serving approximately 400 students to pilot a significantly different high school program that will prepare students in mathematics, science, engineering, and technology to compete in the global economies.

Overview of the Academies

Maryland's STEM Academies will target the untapped potential of Maryland's students who traditionally have not sought rigorous mathematics and science programs or pursued careers in these fields (at least not in the numbers needed to meet Maryland's workforce needs). These Academies will be highly specialized schools staffed by teachers working with scientists and mathematicians from universities and businesses. This collaboration will establish a partnership

among state government, the Maryland State Department of Education, local school systems, the higher education institutions, Maryland businesses, and federal agencies such as NSA, NASA, etc. These STEM Academies will offer a unique and rigorous course of study based on student research, exposure to the professional science community, and leadership skills. The curriculum will provide a foundation of the knowledge and the advanced skills required for college success and future career opportunities in science, mathematics, engineering, and technology. These innovative programs will afford the students access to advanced equipment and technology along with regular interactions with practicing scientists and mathematicians.

Statewide Benefits

Opportunities for students would be:

- to be taught by experts in the fields of mathematics, science, engineering, and technology;
- to participate in internships alongside of mathematicians, engineers, and scientists; and
- to earn college credits through concurrent enrollment programs with higher education.

Students would apply for these Academies using criteria such as academic achievement; standardized tests; participation in advanced mathematics and science courses; demonstrated interest in the study of science, mathematics, engineering, and technology; teacher recommendations; writing samples; and communication skills.

Opportunities for teachers would be:

- to receive job-embedded, focused, high-quality professional development;
- to co-teach with experts in mathematics, engineering, and science; and
- to work in summer internships with participating partners.

Estimated Budget for one STEM Academy

- Start-Up:
 - \$119,000 planning and some professional development;
 - \$245,000 equipment/one position/ materials; and
 - \$317,000 upgrade equipment (high end computers and software).
- For each grade level in the program per year:
 - \$8000 professional development;
 - \$20,000 materials;
 - \$3,000 furniture;
 - \$15,000 science equipment;
 - \$60,000 technology equipment; and
 - \$30,000 classroom furnishings.
- Staff per year:
 - \$350,000 - 5 full time teachers; and
 - \$85,000 - 1 coordinator to help organize external education opportunities.

The budget could vary significantly based on the STEM model selected. The State allocation would cover part of these costs, with local schools systems, higher education, and the private sector contributing staff, facilities, materials, internship sites, etc.

4. Reduce funding for Governor’s Teacher Excellence Award program. \$400,000 GF

MSDE opposes this recommendation. The Governor’s Teacher Excellence Awards were designed to recognize Maryland teachers who have distinguished themselves by their achievements and contributions to Maryland students. Maryland is working especially hard at this time to upgrade its teaching force so that it can have a highly qualified teacher in front of every class of students in the State—a target included in the federal No Child Left Behind Act of 2001.

Maryland’s ability to attract and retain qualified teachers to the State is deeply challenged by the competition among surrounding states. The Excellence Awards, patterned after several such award programs in business and industry, are desperately needed to reinforce the value our communities’ place in the contributions of our 56,000 classroom teachers around the State. If the proposed \$500,000 cost of this program is cut by 80 percent, the potentially far-reaching impact of these twenty significant awards would almost completely evaporate.

The initial plan for this program was to distribute awards regionally. Twenty substantial awards would permit the State to recognize teachers in key subject areas in each of five geographic regions, with four awards per area. Reducing the program to just four awards would provide too few opportunities to recognize teachers from each region. Further, reducing twenty awards to \$5,000 per teacher would severely reduce the significance of these awards.

The Governor’s Teacher Excellence Awards would sound out an important message to prospective teachers that Maryland values its teaching force, and that it is a good place to teach and live. We feel it is critical that the awards be sustained in the proposed budget so that we can make it clear that Maryland values its teachers as industry and business values and awards its exemplars.